

ISCHYROPTERON BIGOT REVISITED (DIPTERA: TEPHRITIDAE)

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Abstract.—The headless female holotype of *Ischyropteron nigricaudatum* Bigot from near Rio de Janeiro, Brazil, is described in detail; and speculations are made on its generic and supergeneric relationships. It is believed to belong to the trypetine tribe Adramiini, which has never been heretofore reported from the New World.

In 1889, J. M. F. Bigot described *Ischyropteron nigricaudatum* from a single female specimen collected in Teresopolis, a suburb of Rio de Janeiro, Brazil (Bigot, 1889a). Apparently believing that his name was preoccupied by *Ischyroptera* Pokorny 1887, he unnecessarily proposed *Calopteromyia* for this monotypic genus later the same year (Bigot, 1889b). The name *Ischyropteron* of authors is either an error or an unjustified emendation.

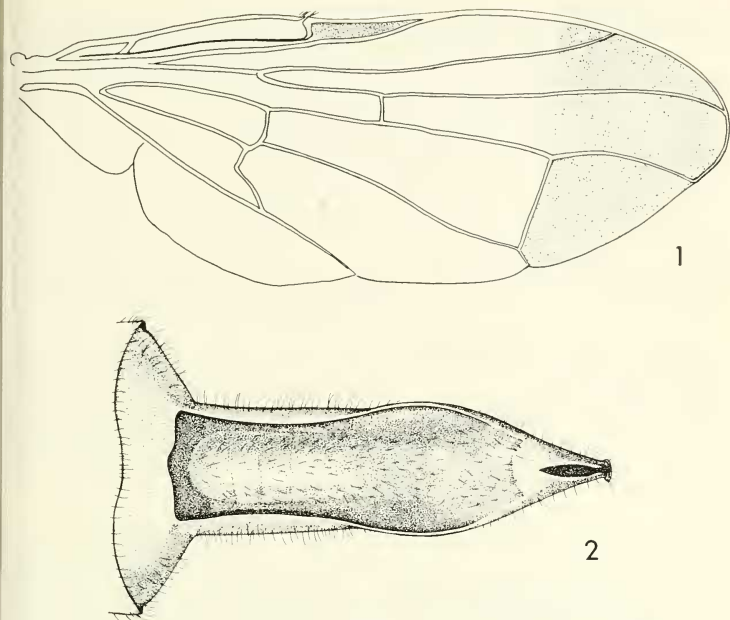
This unusual fly is redescribed here because its relationship with other genera is obscure (see Discussion below). It is hoped that additional specimens may be found, thus making available other characteristics that will relate the species properly to others, either in the Neotropical Region or elsewhere.

Ischyropteron nigricaudatum Bigot

Description.—Female. Head entirely missing, but Bigot describes it as follows (1889a: xxix): “Antennis basi vicinus, segulo tertio oblongo, angusto, apice rotundato, usque ad orem fere elongato, chaeto nudo; fronte conica, prominula, superne macrochaetis, parce sed longe, instructa, facie obliqua et, genis, nudis; haustello modice exserto, labris haud perspicuis; palpis elongatus, apice parum dilatatis . . . antennis sordide fulvis, basi parum infuscatus; palpis haustelloque pallide fulvis; fronte, utrinque, superne, fusco-diffuse uni-notata, et, facie, fulvo pictis, genis, infra oculos, fusca nigro ini-maculatis . . .”

Thorax uniformly yellowish brown, scutum ornamented with dark brown markings as follows: Paired fasciae extending from anterior margin to level of anterior supra-alars, narrowing in region of transverse suture, then widening posterior to suture before terminating, these fasciae separated by a distance equal to the width of one fascia; paired eggshaped spots laterad of

median fasciae, situated between a transverse line through humerals and a point immediately anterior of transverse suture and separated from median fascia by $\frac{1}{2}$ the width of spot; a 3rd pair of elongate, rounded spots between a point immediately posterior of transverse suture and one slightly posterior of dorsocentrals, and a 4th pair of smaller black spots immediately behind wing bases. Scutellum concolorous with thorax, posterior $\frac{1}{3}$ of postnotum darkened. Scapulars not evident; 1 pair humerals, 2 pairs notopleurals, 1 pair anterior supra-alars, 1 pair postalars, 1 pair intra-alars, 1 pair acrostichals, 2 pairs anepisternals, the lower pair about $\frac{2}{3}$ as long as the upper, 1 pair anepimerals, all the foregoing bristles black, shining. Two pairs long shining black scutellars approximately equal in length; scutum and scutellum beset with slender, sharply pointed, black setulae about $0.1\times$ as long as presutural bristle. Pleurae almost entirely devoid of setulae except in a small triangular area immediately below notopleurals and the 6–8 notopleural setulae, which are shorter, colorless. *Wing* (Fig. 1) Length-to-width ratio 2.6:1, appearing longer and wider than usual in the family, the clear membranes with a yellowish cast and the veins in unpatterned areas of disk distinctly brown, 2nd costal cell about $5.6\times$ as long as its greatest width, subcostal cell dark, at least $3\times$ as long as wide, wedge shaped, vein R1 rather straight, no prominent bristles present at subcostal break, vein r-m situated basad of middle of discal cell and pointing to about the middle of subcostal cell, veins r-m and dm-cu almost parallel, base of distal extension of basal cubital cell about $\frac{1}{2}$ as wide as the cell itself, the extension triangular; little longer than its own width; anal lobe rather prominent; pattern comprising an evenly brown area in apical $\frac{1}{4}$ of wing distad of vein dm-cu, its inner transverse margin parallel with that vein, vein R5 haired to level of vein dm-cu above, bare below. *Legs* Unusually long and slender, fore coxa about $\frac{1}{2}$ as long as fore femur, fore femur with a few short dorsal setulae instead of a "comb," a single dark seta posteroventrally on distal $\frac{1}{4}$, fore tibia without outstanding setae; mid femur without outstanding setae, apical $\frac{1}{2}$ of mid tibia slightly enlarged, a short black posterior bristle at middle, 2 long, stout apical bristles; apical $\frac{1}{4}$ of hind femur with one or a pair of black apical bristles and a single black dorsolateral bristle immediately proximad; hind tibia with a small dark anterior bristle immediately beyond middle; tarsomeres 3–5 on all legs dark brown, tarsomere 2 and at least apical $\frac{1}{4}$ of tarsomere 1 on middle and hind legs also dark brown. *Abdomen* Terga and sterna light brown, each slightly darkened on basal $\frac{2}{3}$, abdominal terga 1 and 2 apparently fused, together almost as long as remaining terga, tergum 6 about $\frac{1}{2}$ as long as tergum 5, setulae about as long and numerous as on scutum but light yellowish brown or colorless; ovipositor sheath (Fig. 2) $\frac{1}{2}$ as long as abdomen, with configuration as shown in the figure, flattened condition possibly due to drying, ovipositor not visible through integument of sheath.



Figs. 1-2. *Ischyropteron nigricaudatum*, female. 1, Right wing, dorsal view. 2, Ovipositor sheath, dorsal view.

Discussion.—Among the Neotropical Tephritidae, *I. nigricaudatum* has no close morphological relationships. Its long, broad wings and long, very slender legs are not at all characteristic of other New World fruit flies; and, together with the head characters stated by Bigot, in fact relate it more closely with the Richardiidae than with any other group of flies outside the family. However, G. C. Steyskal (personal communication) states that it is definitely not a richardiid, due principally to the sharply upturned subcostal vein.

Morphologically, *Ischyropteron* somewhat resembles some species of *Euphranta*; but the wing pattern is quite different, the subcostal cell is much longer and narrower, and vein r-m is situated proximad of the middle of the discal cell. In correspondence, D. E. Hardy has suggested that *Ischyropteron* may relate to several genera of Xyphosiini, but most members of that tribe as defined by Hering (1947) have essentially dark wings with yellow or white spots and/or stripes and have quite a different habitus.

Ischyropteron rather closely fits the concept of the tribe Adramiini as discussed by Hardy (1974) in that the body bristles are rather delicate; dorsocentrals, presuturals and katepisternals are not present; the abdomen is long, comparatively narrow and straight sided; and the wing is exceptionally long in comparison to body length. Generically, however, the genus appears to be distinct, differing by at least one character from each of the 8 Oriental adramiine genera discussed by Hardy (1973, 1974) and from each of the 5 known Afrotropical genera.

It is hoped that specimens with heads become available for study. If so, the supergeneric relationships of *Ischyropteron* can be made clear. If in fact this genus is eventually shown to be an adramiine as discussed above, the presence of this tribe in the New World will be recorded for the first time.

ACKNOWLEDGMENTS

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